

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000948**Date Inspected:** 23-Nov-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2330**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG, 89 & 114 Meter Mock-Up**Summary of Items Observed:**

CWI Names:Lee Chan Woo, Lu Jian Ping, Fu Guo Gang, Xu Lefeng

**Mock-Up 77**

This Quality Assurance Inspector was asked by ZPMC Quality Assurance Department personnel Lai Tao to witness and perform magnetic particle testing on the web to diaphragm SA104 root welds. It was pointed out to Mr. Lai Tao that run off tabs were not being used at the ends of the welds. Mr. Lai Tao asked is this Quality Assurance Inspector was going to stop ZPMC for continuing to work on the piece. Mr. Lai Tao received the answer "No Quality Assurance is not stopping work". Mr. Lai Tao then went and conferred with his colleges and came back to say that ZPMC is going to fit up and weld on run off tabs before proceeding any further.

**Mock-Up 89**

This Quality Assurance Inspector observed the welding being performed by Li Zho Qian, welder identification 048810 on MUSB MA38 Skin Plate Sub-Assembly (Face 'E') complete joint penetration weld number 10. Some of the essential welding variable were checked and found the voltage to be 31.6, the amperage 308, the travel speed 299 millimeters per minute and the pre-heat temperature 128 degree Celsius.

This Quality Assurance Inspector observed ZPMC Magnetic Particle Technician Cai Xinxin performing magnetic particle testing on MUSB MA21 Skin Plate Sub-Assembly (Face 'A') partial joint penetration root welds 5 and 17. Mr. Cai Xinxin stopped the testing due the amount of grinding carried out on these root welds.

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## WELDING INSPECTION REPORT

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Mock-Up 114

ZPMC Ultrasonic Technicians Li Li Ming and E Shiu Qin performed ultrasonic testing on MUC-A65 and MUC-A67 Interior Splice Assemblies. MUC-A65 welds 1 & 2 were found to be acceptable the two technicians however MUC-A67 was found to be unacceptable due to two defects.

OBG

This Quality Assurance Inspector observed the welding being performed by Li Shu Liang, welder identification 048801 on BP004-01-005 complete joint penetration flange weld number 10. Some of the essential welding variable were checked and found the voltage to be 25.3, the amperage 197, and the travel speed 101 millimeters per minute.

This Quality Assurance Inspector observed the welding being performed by Yin Guoqin, welder identification 058-81 on FB004-01-002 complete joint penetration B-L2C-S-1 submerged arc weld. Welding had just been completed on the Quality Assurance Inspectors arrival so the essential welding variable were no checked.

### Summary of Conversations:

No conversations held today.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Berger,Bruce	Quality Assurance Inspector
<b>Reviewed By:</b>	Cochran,Jim	QA Reviewer

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